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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,824	04/25/2001	Tsutomu Nakamura	Q62666	6099

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06/03/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER

MAKI, STEVEN D

ART UNIT

PAPER NUMBER

1733

7

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,824

Applicant(s)

NAKAMURA, TSUTOMU

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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- 1) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2) Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 1, 2, 3 and 7, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the subject matter of "a pair of cross belt members arranged in parallel to each other in a common plane in a circumferential direction of the tire" (emphasis added). Figure 1 fails to show the cross belt members being in a "common plane" since the cross belt members are arranged in parallel to each other in a common curved plane in a circumferential direction of the tire *instead of being* arranged in parallel to each other in a common flat plane in a circumferential direction of the tire. In each of claims 1, 2, 3 and 7, it is suggested to change "common plane" to --common curved plane--

- 3) The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

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of the following is required: appropriate incorporation of "a pair of cross belt members arranged in parallel to each other in a common [curved] plane in a circumferential direction of the tire" into the specification.

4) Applicant is advised that should claim 8 be found allowable, claim 10 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

There is no difference in scope between the tire of claim 8 and the tire of claim 10. The same tire is being described; it being noted for example that the acute angle becomes obtuse angle when the direction of mounting the tire on a vehicle is changed.

5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7) **Claims 1-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Europe '949 (EP 756949).**

tire

As to claim 7, **there is no difference between the claimed tire and the tire embodiment shown in figure 3 of Europe '949.** In any event: As to claim 7, it would have been obvious to one of ordinary skill in the art to locate "a pair of cross belt members arranged in parallel to each other in a common curved plane in a circumferential direction of the tire so as to be disposed on opposite sides of an equatorial plane and separated by an opening space" in Europe '949's pneumatic radial tire which comprises a spirally wound cord defining a radially external layer since (a) Europe '949 suggests locating a pair of spaced cord containing strips 8c, 8d (spaced cross belt members) adjacent a spiral belt as shown in figure 3 and (b) Europe '949 teaches that the spaced cross belt members define a radially inner layer and are an alternative to the embodiment of figures 1 and 2 in which the radially inner layer, which is adjacent the spiral belt, is shown as being in a common curved plane.

As to claims 8-11, note Europe '949's teaching to incline the cords of the radially inner layer at an angle of 22-45 degrees and to use two spaced cross belt members as the radially inner layer. In any event: It would have been obvious to incline the cords in the cross belt members of the figure 3 embodiment at 22-45 degrees since Europe '949 suggests using the same cord orientation for the belt embodiments of figures 2 and 3 (see page 8 lines 17-18 and page 7 lines 53-54). The angle range of 22-45 degrees is an acute angle (claim 8) falling within the claimed range of 20-80 degrees (claim 9).

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The angle range of 22-45 degrees defines an obtuse angle (claim 10) of 135-158 degrees, which falls within the claimed range of 110-170 degrees when the angle of the same tire is measured in the opposite direction.

As to claim 12, note the width "a" of 10-30% for the opening space and the location of the belt members shown in figure 3. In any event: As to claim 12, the claimed opening space of 1-50 mm and the total width being 70-150% would have been obvious in view of (a) Europe '949's teaching to space the belt members by a space "a" of 10-30% of the axial extension of the belt in a motorcycle tire and (b) Europe '949 shows the width of the radially inner layer as being about the same (about 100% of) the width of the radially outer layer.

method

Since Europe '949 further discloses mounting the tires on a motorcycle (see example), Europe '949 teaches mounting the figure 3 embodiment tire on a front wheel of a motorcycle and mounting a tire of the figure 3 embodiment on a rear wheel of the motorcycle. With the same figure 3 tire being used as the front tire and the rear tire, only four mounting possibilities exist - (1) cords of cross belt members in both front tire and rear tire directed forward, (2) cords of cross belt members in both front tire and rear tire directed opposite of forward, (3) cords of cross belt members in front tire directed forward and cords of cross belt members in rear tire directed opposite of forward, and (4) cords of cross belt members in front tire directed opposite of forward and cords of cross belt members in rear tire directed forward. Since the number of mounting possibilities is limited to four, Europe '949 is considered to disclose each of

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the above four mounting possibilities. In any event (and with respect for example to claims 1 and 2), it would have been obvious to mount the tires on a motorcycle such that both tires have the cords of the cross belt members directed in the same direction (either forward or opposite of forward) since Europe '949 teaches suggests using the same figure 3 embodiment tire on a motorcycle which has only two wheels (only two mounting methods possible in this situation). No unexpected results for mounting front tire and rear tire such that each tire defines the acute angle has been shown. No expected results for mounting the front tire and rear tire such that each define the obtuse angle has been shown.

As to claims 4 and 5, note Europe '949's teaching to use textile or metal cords for the cords of the radially inner belt layer (strips 8c, 8d). In any event: As to claim 4, it would have been obvious to one of ordinary skill in the art to use steel cords having an initial tensile strength of no less than 50CN/cord as the cords for the radially inner layer (strips 8c, 8d) since (a) Europe '949 suggests using metal cords for the cords of the radially inner layer and (b) steel cords having an initial tensile strength of no less than 50CN/cord for a reinforcement between the tread and carcass of a tire is taken as well known / conventional per se; it being noted that applicant has asserted no novelty for these cords per se. As to claim 5, it would have been obvious to one of ordinary skill in the art to use organic cords having an initial tensile strength of no less than 50CN/cord as the cords for the radially inner layer (strips 8c, 8d) since (a) Europe '949 suggests using textile cords for the cords of the radially inner layer and (b) organic cords (e.g. aramid cords) having an initial tensile strength of no less than 50CN/cord for a

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reinforcement between the tread and carcass of a tire is taken as well known / conventional per se; it being noted that applicant has asserted no novelty for these cords per se.

As to claim 6, note the angle of the cords in the strips 8c, 8d of figure 3 and the opening space "a" figure 4. In any event: the claimed opening space of 1-50 mm and the total width being 70-150% would have been obvious in view of (a) Europe '949's teaching to space the belt members by a space "a" of 10-30% of the axial extension of the belt in a motorcycle tire and (b) Europe '949 shows the width of the radially inner layer as being about the same (about 100% of) the width of the radially outer layer.

8) Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Europe '949 (EP 756949) in view of Ubukata et al (US 6250596).

Europe '949, which is discussed above, is considered to anticipate claims 1-12. In any event: As to claims 1-12, it would have been obvious to mount the figure 3 embodiment tire of Europe as set forth in claim 3 in view of (a) Europe '949's teaching to mount the figure 3 tire embodiment which has inclined cords in belt members 8c, 8d on a motorcycle which has only two mounting positions, (b) Europe '949's teaching to use the spiral belt and cross belt members so as to obtain high flexibility of the belt under running conditions on a straight stretch and high stiffness for withstanding slip thrust during a running on a bend (page 9 lines 45-50) and (c) it is generally well known per se in the tire art that the same tire can be mounted in either of two different directions at the same wheel position as exemplified for example by Ubukata et al.

Remarks

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9) Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

The prior art rejection using Armellin in the last office action has been withdrawn in view of the amendment to the claims filed 3-20-03 and applicant's corresponding arguments in the response filed 3-20-03.

As to "a pair of cross belt members arranged in parallel to each other in a common plane in a circumferential direction of the tire" (emphasis added), Europe '949 is considered to disclose / suggest this subject matter.

10) No claim is allowed.

11) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

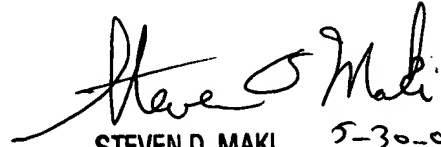
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12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
May 30, 2003


STEVEN D. MAKI
PRIMARY EXAMINER
GROUP 1300
5-30-03
Au 1733